



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,145	06/21/2001	Hiroshi Tanada	MITS:029	5697

7590                    09/26/2002

ROSSI & ASSOCIATES  
P.O. Box 826  
Ashburn, VA 20146-0826

[REDACTED]

NGUYEN, CAM N

[REDACTED]

[REDACTED]

1754

DATE MAILED: 09/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>09/886,145</b>	Applicant(s) <b>Tanada et al.</b>
	Examiner <b>Cam Nguyen</b>	Art Unit <b>1754</b>
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
<b>Period for Reply</b> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>three</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
<ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>		
<b>Status</b> <p>1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>Jun 21, 2001</u></p> <p>2a) <input type="checkbox"/> This action is FINAL.      2b) <input checked="" type="checkbox"/> This action is non-final.</p> <p>3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11; 453 O.G. 213.</p>		
<b>Disposition of Claims</b> <p>4) <input checked="" type="checkbox"/> Claim(s) <u>1-27</u> is/are pending in the application.</p> <p>4a) Of the above, claim(s) _____ is/are withdrawn from consideration.</p> <p>5) <input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p>6) <input checked="" type="checkbox"/> Claim(s) <u>1-27</u> is/are rejected.</p> <p>7) <input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p>8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.</p>		
<b>Application Papers</b> <p>9) <input type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10) <input checked="" type="checkbox"/> The drawing(s) filed on <u>Jun 21, 2001</u> is/are a) <input checked="" type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p>11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.</p> <p>12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.</p>		
<b>Priority under 35 U.S.C. §§ 119 and 120</b> <p>13) <input checked="" type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> <p>a) <input checked="" type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of:</p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Certified copies of the priority documents have been received.</li> <li>2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.</li> <li>3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> <p>*See the attached detailed Office action for a list of the certified copies not received.</p> <p>14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).</p> <p>a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.</p> <p>15) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</p>		
<b>Attachment(s)</b> <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____</p> <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p>		

Art Unit: 1754

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' priority document filed in JAPAN on 6/22/2000 has been received.

### ***Claim Objections***

2. Claims 1, 3, 15-16, 22, & 25 are objected to because of the following informalities:
  - A. In claim 1, line 5-6, "alkali earth metals" should be --alkaline earth metals--.
  - B. In claim 3, line 4, "typical elements" should be replaced with --non-transition elements--.
  - C. In claim 15, line 8-9, "alkali earth metal" should be --alkaline earth metals--.
  - D. In claim 16, line 4, "typical elements" should be replaced with --non-transition elements--.
  - E. In claim 22, line 6, "alkali earth metals" should be --alkaline earth metals--.
  - F. In claim 25, line 7, "alkali earth metals" should be --alkaline earth metals--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112 (Second Paragraph)***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1754

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. In claims 1, 15, 22, & 25, the proper Markush terminology should be --wherein at least one absorbent agent selected from a group consisting of alkali metals and alkaline earth metals--. See MPEP § 2173.05(h).

B. In claim 3, line 2-5, the proper Markush terminology is --said effect inhibiting material is comprised of one or more materials selected from a group formed by an acid oxide including at least one acid substance selected from a group consisting of Group-IV, Group-V, Group-VI transition elements and Group-IV, Group-V, Group-VI non-transition elements--. See MPEP § 2173.05(h).

C. Regarding claim 4, it appears that silicon (Si) is not the element of the transition and non-transition metal groups listed in claim 3.

D. In claim 16, line 2-5, the proper Markush terminology is --said effect inhibiting material is comprised of one or more materials selected from a group formed by an acid oxide including at least one acid substance selected from a group consisting of Group-IV, Group-V, Group-VI transition elements and Group-IV, Group-V, Group-VI non-transition elements--. See MPEP § 2173.05(h).

Art Unit: 1754

E. The phrase "a three-way catalyst layer" in the claims does not particularly point out the catalytic material applicants intended, thus renders the claims vague and indefinite.

F. Regarding claims 11-14, it is unclear as to what "an absorbing agent block layer" applicants intended, thus renders the claims vague and indefinite.

***Claim Rejections - 35 USC § 102(e)***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogai (US Pat. 6,149,877).

Ogai discloses an exhaust gas purifying catalyst comprising: a base member having a honeycomb structure; a catalyst supporting layer formed on a surface of a cell wall of said base

Art Unit: 1754

member; a catalytic noble metal loaded on said catalyst supporting layer; and a NO<sub>x</sub> adsorbing material loaded on said catalyst supporting layer (see col. 10, ln 32-44). Ogai further discloses the catalyst supporting layer comprises at least one material selected from the group consisting of alumina, silica, titania, silica-alumina, and zeolite (see col. 10, claim 5). The NO<sub>x</sub> adsorbing material is selected from the group consisting of alkali metals, alkaline earth metals and rare earth metals (see col. 11, claim 9).

With respect to the claimed limitation on “a three-way catalyst layer”, in view of a lack of specific catalytic material being claimed for the claimed three-way catalyst layer, it is considered the claims are met because Ogai teaches a catalytic noble metal is loaded on said catalyst supporting layer (see Ogai at col. 10, ln 32-44).

With respect to the claimed limitation on “an adsorbing agent block layer”, in view of a lack of specific catalytic material being claimed for the claimed three-way catalyst layer, it is considered the claims are met by the reference since Ogai teaches the catalyst contains the NO<sub>x</sub> adsorbing material selected from the group consisting of alkali metals, alkaline earth metals and rare earth metals (see Ogai at col. 11, claim 9).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 1754

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogai (US Pat. 6,149,877).

Ogai discloses an exhaust gas purifying catalyst as described above, except for the following.

While Ogai does not disclose a process for preparing the above exhaust gas purifying catalyst, it is considered *prima facie obvious* to one of ordinary skill in the art that the catalyst disclosed is prepared in the same manner as in applicants' claimed process in view of the catalyst layers, the catalytic metals, and the components disclosed in the reference.

### *Citations*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miyoshi et al. (US Pat. 5,948,376), Kanesaka et al. (US Pat. 5,427,989), Kurokawa et al. (US Pat. 5,677,258), Takemoto et al. (US Pat. 5,409,671), Leyrer et al. (US Pat. 5,354,720), Kanesaka et al. (US Pat. 5,681,788), Suga et al. (US Pat. 5,990,038), Lindner et al. (US Pat. 6,348,430 B1), Miyoshi et al. (US Pat. 5,911,960), Mizuno et al. (US Pat. 5,443,803), Muramatsu et al. (US Pat. 5,208,202), Inoue et al. (US Pat. 4,221,768), Kasahara et al. (US Pat. 5,270,024), Kudo et al. (US Pat. 3,929,670), Jarvis et al. (US Pat. 6,182,443 B1), Kasahara et al.

Art Unit: 1754

Tanaka et al. (US Pat. 6,426,316 &

(US Pat. 5,762,892), Suzuki et al. (US Pat. 6,159,897), Murakami et al. (US Pat. 5,494,878), &  
Kurokawa et al. (US Pat. 6,066,587) are cited for related art.

***Conclusion***

10. Claims 1-27 are pending in the application. Claims 1-27 are rejected. No claims are allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (703) 305-3923. The examiner can normally be reached on M-F from 8:30 am. to 6:00 pm, with alternative Monday off.

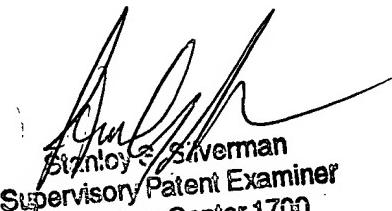
The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (before finals) and (703) 872-9311 (after-final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Nguyen/cnn

CNN

September 18, 2002

  
Shirley Silverman  
Supervisory Patent Examiner  
Technology Center 1700